TAITO

CHASE H.Q. ™

UP RIGHT

CHASE H.Q., WE HAVE AN EMERGENCY HERE!
THE CRIMINAL IS GETTING AWAY.
CHASE AND APPREHEND THE VEHICLE.

LET'S GO MR. DRIVER!!

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SERVICE INSTRUCTIONS AND PARTS CATALOGUE

CHASE H.Q.

Specifications:

1. Power Supply   240/220 vac

2. Power Consumption   140 W

3. Play Pricing   Adjustable on dip switches

4. TV Monitor   20-inch Color (Hantarex 9000E)

5. Dimensions   Width : 588mm
                         Depth : 870mm
                         Height: 1823mm

6. Weight   Approximately 108 Kg

  * The specifications and appearance may be changed for
   improvement.

Table of Contents

Installation

o Avoid rough handling in transportation; the picture tube is
  fragile.

o This machine is designed for "indoor" use.
  So install the machine indoors only.

o Install the machine on flat-surfaced floor(made of concrete,
  etc.) and provide suitable space around it. Do not install the
  machine in locations with vibrations.

o Do not install the machine in locations exposed to sunlight or
  excessive heat to avoid the enviromental temperature rise.
  Also, do not install the machine at places where it is humid
  and/or dusty.

---

o Do not install the machine in dangerous places in view of
      fire door exits   fire alarm equipment, etc.

---

o Never fail to connect the "ground terminal" of the machine
  and the "ground line" of the power supply cord.

---

o Before turning on the power switch!
  The screws for fastening the parts may be loosened by
  vibrations, etc. in transportation. Make certain that the
  PC board is correctly attached and the connectors are
  perfectly plugged.

o Plug the power cord plug into the outlet and turn on the
  power switch.
  Before this, make sure the power supply and the current
  capacity.

o In case that any malfunction occurs after turning on the power:
  First, turn off the power switch, and check the power supply
  and each output by referring the handling care.
  This machine does not work normally unless the proper power
  supply voltage is supplied.

Handling Care

o This game uses microprocessors and other ICs for long stable
  performance life, however, as with sophisticated electronic
  equipment, certain precaution must be observed to avoid damage.

  • Do not attempt to service with ordinary testing equipment,
    since the internal voltage of testing equipment may cause
    damage to the circuitry.

  • Never connect or disconnect any of connectors of the PCB set
    when the power is on.

o As higher voltages exist in the video monitor, extra care must
  be taken when inspecting and adjusting the video monitor.

o Do not use fuses with other current capacity than specified.
  If the fuses with the specified current capacity are blown,
  check the power unit.

In the cabinet
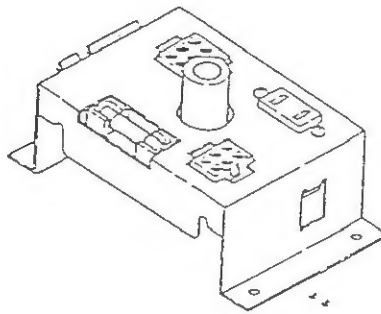
(Connector Box)
(5A)

4. Maintenance

o Although this machine has been designed basing on the good
  safety standards, some trouble may occure in a long period.
  Therfore, it is necessary for the machine owner and operation
  manager to take daily checking to make sure that the safety
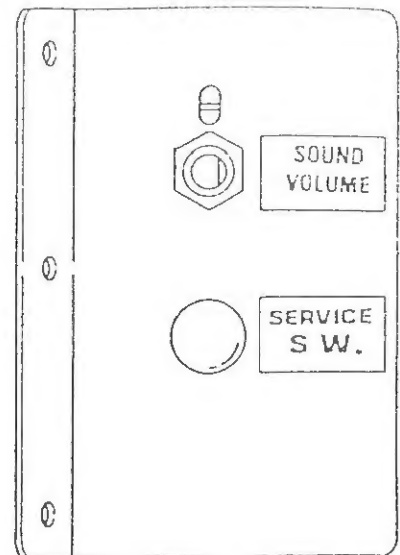 condition of the machine is well kept.

Central Control

⋆ The central control is located inside the rejector door.

o Sound Volume Control Knob

   Turning the knob clockwise
   increases the sound volume.
   Adjust it to suit the environment
   of the location.

o Service Switch

   By pressing this switch, the
   number of credits can be increased
   without operating the coin counter.

★ Explanation for Adjustors

o R. G. B. -GAIN, BIAS

   R-GAIN, BIAS···for changing the strength of red color

   G-GAIN, BIAS···for changing the strength of green color

   B-GAIN, BIAS···for changing the strength of blue color

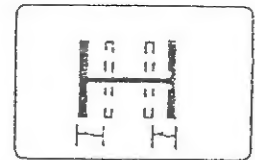o BRIGHT(Brightness Control)

   Use this control for adjusting the screen
   brightness.
   Adjust this control depending on the
   condition of location.

o H. SIZE(Horizontal Width Control)

   Use this control for adjusting the horizontal
   picture size.
   When adjusting, use a core driver.

o H. HOLD(Horizontal Hold Control)

   Use this control when the picture rolls
   horizontally.

o H. PHASE(Horizontal Phase Control)

   Use this control for adjusting the horizontal
   timing.
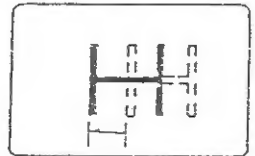
o V. SIZE(Vertical Picture-Size Control)

   Use this control for adjusting the vertical
   picture size.

o V. HOLD(Vertical Height Control)

   Use this control when the picture rolls
   vertically.

o V. POSITION(Vertical Centering Control)

   Use this control to move the picture vertically
   onto the desired position.

o V. LIN(Vertical Linearity Control)
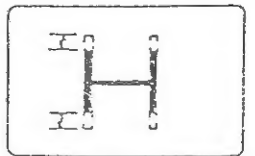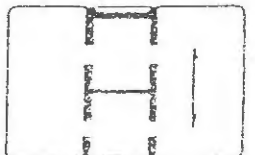
   Use this control when the picture
   shrinks vertically.

o H. POSITION(Vertical Display Position Control)

   Use this control for moving the
   picture horizontally onto the
   desired position.
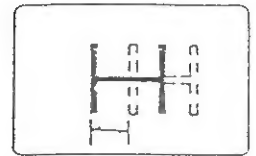
o Screen-Size-Changing Chip

   There are two chips; "NARROW"(Standard Size) and "WIDE"
   (Larger Size). Normally, set to the "NARROW".

o Screen-Inversion Connectors

   There are two connectors; "NORMAL"(Standard) and "REVERSE"
   (Screen-Inversion). Normally, set to the "NORMAL".

o FOCUS(Focus Control)

   Use this control for adjusting the screen focus.

o SCREEN

   This is to be set to the "cut-off" point.
   Normally, this control is not used.

④ The distance to the criminal's car is displayed on the right part of the screen and the damage of the criminal's car is displayed on the left part of the screen.

⑤ When the turbo switch is pressed, the player's car is explosively accelerated by the turbo power for a given time. (The number of turbo-usable times is displayed on the lower left part of the screen, and this number is reset every time when each stage is cleared. Note that the remaining number of turbos in the previous stage is not added to that for the next stage.)

⑥ The game ends when the time reaches "0", or 5 stages have been cleared.

⑦ When the game is over, if the score is ranked in the 10th place or higher, the name registration can be made. (In this case, select letters by using the steering wheel, and register them by using the accelerator or the turbo switch.)

Adjustments of Game PC Board
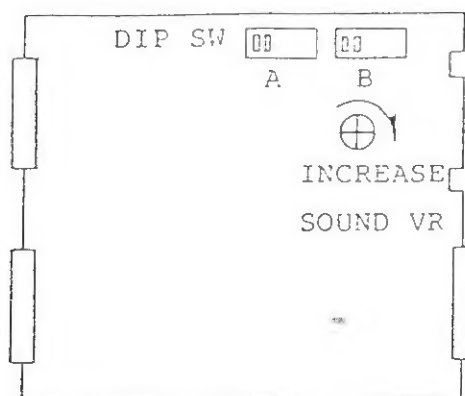
o Sound VR•••The sound volume can be increased by turning
to the direction as shown with the arrows.
However, these volume controls are not used
in a normal condition because the sound volume
control is equipped within the shift lever unit
as the central control.

NOTE) BEFORE CHANGING THE SETTINGS OF THE DIP SWITCH, TURN THE POWER SWITCH OFF.

CHASE HQ
DIP SWITCH SETTINGS

DIP SW. A   *:FACTORY SETTINGS.

SETTING	POSITION	1	2	3	4	5	6	7	8
CABINET TYPES	*UP WITH STEERING WHEEL LOCK	OFF	OFF						
	UP WITHOUT STEERING WHEEL LOCK	ON	OFF						
	CONVERSION TOP SPEED C/P	OFF	ON						
	CONVERSION TOP SPEED DELUXE	ON	ON						
TEST MODE	*NORMAL GAME			OFF					
	TEST MODE			ON					
ATTRACT MODE	* PRODUCED				OFF				
	NOT PRODUCED				ON				
PLAY PRICING COIN - A	*1 COIN 1 PLAY					OFF	OFF		
	2 " " "					ON	OFF		
	3 " " "					OFF	ON		
	4 " " "					ON	ON		
PLAY PRICING COIN - B	*1 COIN 2 PLAY							OFF	OFF
	" " 3 "							ON	OFF
	" " 4 "							OFF	ON
	" " 6 "							ON	ON

DIP SW. B

SETTING	POSITION		1	2	3	4	5	6	7	8
GAME DIFFICULTY A = EASY D = DIFFICULTY	* RANK	B	OFF	OFF						
	"	A	ON	OFF						
	"	C	OFF	ON						
	"	D	ON	ON						
TIME [INTIAL SETTING]	* 60	SEC.			OFF	OFF		OFF		
	70	"			ON	OFF				
	65	"			OFF	ON				
	55	"			ON	ON				
NUMBER OF TURBOS STOCKED	* 3						OFF			
	5						ON			
DAMAGE-CLEARING WHEN THE GAME IS CONTINUED	* WITH								OFF	
	WITHOUT								ON	
CONTINUED PLAY	* WITH									OFF
	WITHOUT									ON

<u>NOTE</u>: REGARDING THE TYPES OF CABINET
FOR THE TOP SPEED DELUXE MODEL. THE MOVABLE CABINET IS USED.

Test Mode

o By turning on the DIP switch A-3 located on the main PC board
  and by turning on the power switch, the screen changes to the
  test mode menu.

```
          TEST   MODE

            MENU

     )  C. R. T  TEST  ────────────▶  Test for
     ↕                                 Monitor
     )  INPUT  TEST  ──────────────▶  Test for each
                                       control system


  SELECT  TEST  ITEM  WITH  STEERING
  AND  PUSH  START  SWITCH
```
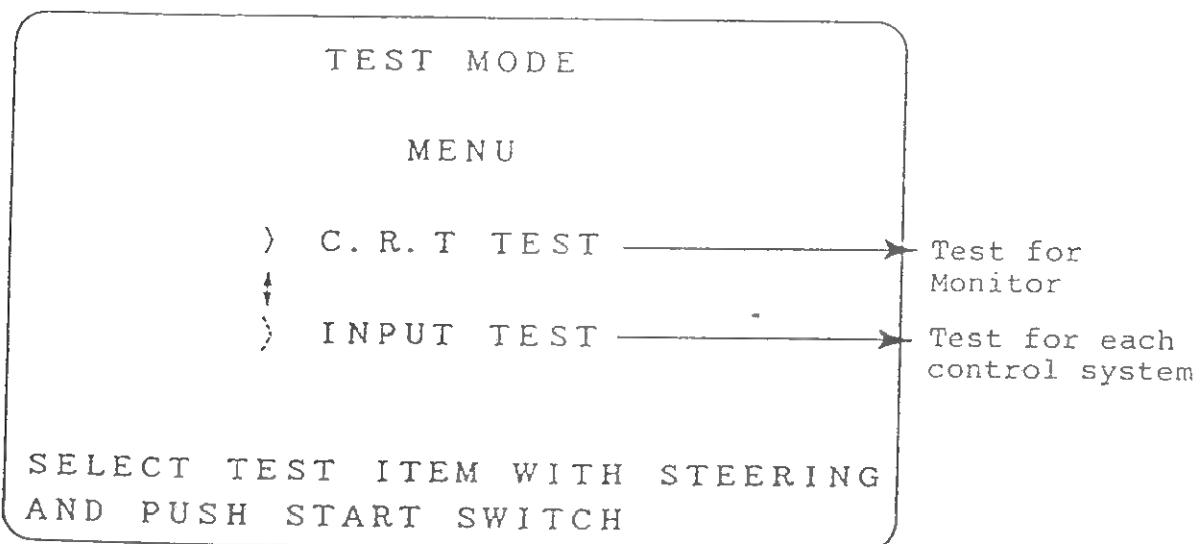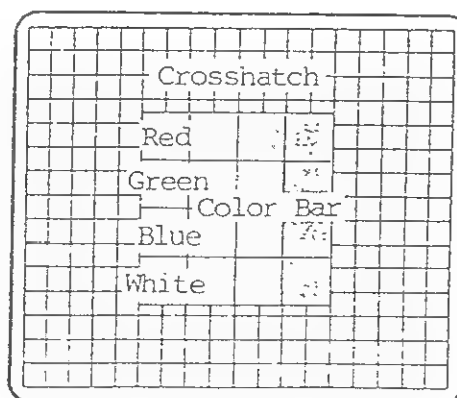
o When changing to each test item, select an item by using the
  steering wheel, then press the start button.

1) C.R.T. Test

As the crosshatch and color bars are
displayed on the screen, the screen
condition, colors and brightness
can be adjusted.
(As for the adjustments of the
 TV monitor, see the section 8.)

o When the turbo switch is pressed, the screen returns to the
  test mode menu.

Input Test

o Checking for each switch and control system can be done by
  this test.

o When the turbo switch is pressed, the screen returns to the
  test mode menu.

```
┌─────────────────────────────────────────────────┐
│                 INPUT  TEST                       │
│                                                   │
│     COIN  A:OFF              COIN  B:OFF          │
│     SERVICE:OFF                START:OFF          │
│     LOW  GEAR:ON               TURBO:OFF          │
│   HIGH  GEAR:OFF          STEERING:FFFE           │
│       ACCELE:OFF              BRAKE:OFF           │
│                                                   │
│                  87654321                         │
│         DIPSW  A:HHHHHLHL    L:ON                 │
│               B:HHHHHHHH    H:OFF                 │
│                                                   │
│         SOUND  CODE:1F                            │
│         RAM  OK  !                                │
│                                                   │
│   PUSH  TURBO  SWITCH  TO  RETURN                 │
│   TO  MENU  MODE                                  │
└─────────────────────────────────────────────────┘
```

Note: Sound Code
      Checking for the sound output can be done when selecting
      the sound code by using the steering wheel and by pressing
      the start button.

  o When the shift lever is turned to the "H" side, the
    patrol light is turned on.

  o The brake is not used.

CHASE HQ

EDGE CONNECTOR

COMPONENT SIDE

Solder Side			Pin	Pin		Component Side	
GROUND	BLK		A	1	BLK	GROUND	
GROUND	BLK		B	2	BLK	GROUND	
+5v	PNK		C	3	PNK	+5v	
+5v	PNK		D	4	PNK	+5v	
-5v	VIO		E	5	VIO	-5v	
+13v	RED/BLK		F	6	ORG	+12v	
	KEYWAY		H	7	KEYWAY		
METER B	WHT/YEL		J	8	WHT/ORG	METER A	
			K	9			
			L	10	GRY/WHT	SOUND R +	
			M	11	GRY/BLK	SOUND R -	
VOLUME 1	YEL/BRN		N	12	YEL/RED	VOLUME 2	
			P	13	YEL/GRN	VOLUME 3	
SERVICE	RED/ORG		R	14			
BRAKE	BLU/YEL		S	15			
COIN B	YEL/BLK		T	16	ORG/BLK	COIN A	
			U	17			
			V	18	ORG/RED	TURBO.	
START	RED/BLU		W	19	YEL/VIO	CENTRE	
ACCEL.	YEL/BLU		X	20	PNK/BLK	SHIFT	
			Y	21			
PT LIGHT L	WHT/BLU		Z	22	WHT/VIO	PT LIGHT R	
			AA	23			
			AB	24			
			AC	25			
HANDLE -	GRN/BRN		AD	26	ORG/BLU	HANDLE +	
GROUND	BLK		AE	27	BLK	GROUND	
GROUND	BLK		AF	28	BLK	GROUND	

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ELECTROCOIN AUTOMATICS LTD

PART No 12164   ELECTRONIC CREDIT BOARD

PINOUT INFORMATION

PIN	COLOUR	FUNCTION		
1.	YEL/BLK	10p	MICROSWITCH OR N.P.N. OPEN COLLECTOR INPUT.	
2.	N/C	10p	MICROSWITCH OR N.P.N. OPEN COLLECTOR INPUT.	
3.	WHT/BLU	10p	PNP INPUT (MS 111/SENTINEL)	
4.	N/C	20p	INPUT	(MICROSWITCH)
5.	WHT/GRN	20p	INPUT	(MS 111/SENTINEL)
6.	N/C	50p	INPUT	(MICROSWITCH)
7.	WHT/BLK	50p	INPUT	(MS 111/SENTINEL) ·
8.	N/C	£1	INPUT	(MICROSWITCH)
9.	WHT/YEL	£1	INPUT	(MS 111/SENTINEL)
10.	BLU/BLK	0	VOLTS	(10p INHIBIT)
11.	BLU/YEL	0	VOLTS	(20p INHIBIT)
12.	BLU/ORG	0	VOLTS	(50p INHIBIT)
13.	BLU/WHT	0	VOLTS	(£1 INHIBIT)
14.	BLACK	0	VOLTS	
15.	BLACK	0	VOLTS	
16.	N/C	0	VOLTS	
17.	N/C	0	VOLTS	
18.	ORANGE	+ 12v DC		
19.	ORANGE	+ 12v DC		
20.	ORANGE	+ 12v DC		
21.	BLU/VIO	POSITIVE COMMON FOR MS111/SENTINEL		
22.	WHT/RED	METER OUTPUT (NPN OPEN COLLECTOR)		
23.	ORG/BLK	CREDIT OUTPUT (NPN OPEN COLLECTOR)		
24.	N/C	0	VOLTS	

NOTES:-   1) USE 0 VOLTS FOR NEGATIVE COMMON IF PLUGGING INTO MS 125
SEPERATOR UNIT.

2) ENSURE THAT THERE IS NO COIN METER CONNECTED ACROSS ANY
INPUT, eg, VIA A MICROSWITCH OR AN ADAPTOR CARD.

NOTE:- ON MOST UNIGAME ADAPTORS PIN 10 IS LINKED TO PIN 24, AND
PIN 11 IS LINKED TO PIN 25, THESE LINKS SHOULD BE REMOVED
COMPLETELY. THEN SHORT PIN 11 TO PIN 12 ON THE ADAPTOR
CARD. THIS THEN USES THE OUTPUT FROM THE CREDIT BOARD
METER DRIVE.

3) THE METER WILL ALWAYS TOTAL CASH IN 10p UNITS REGARDLESS
OF ANY CREDIT SETTING.

4) MORE THAN ONE COIN MECH MAY BE FED INTO THE PCB.

e.g. A) S10   (UP TO FOUR)
      B) S10   X MS 111
      C) S10   X MS 125
      D) S10   X SENTINEL

5) MOST CREDIT BOARDS ARE SUPPLIED WITH A STANDARD CREDIT LOOM.
    (PART No. 16315) FITTED WITH A MALE 6 WAY AMP MATE 'N' LOCK
    CONNECTOR. PINOUTS ARE SHOWN BELOW.

PIN No	COLOUR	FUNCTION
1	ORANGE	+12v DC SUPPLY
2	PINK	+5v DC (LAMP SUPPLY)
3	N/C	
4	WHT/RED	TO COIN METER
5	BLACK	0v DC
6	ORG/BLK	COIN INPUT TO GAME PCB

DIP SWITCH SETTINGS   (VERSION 2-0)

PRICE OF PLAY	SW 6	SW7	SW8
10p	ON	ON	ON
20p	OFF	ON	ON
30p	ON	OFF	ON
40p	OFF	OFF	ON
50p	ON	ON	OFF
60p	OFF	ON	OFF
£1	ON	OFF	OFF
£2	OFF	OFF	OFF

SWITCH 5		
	ON	1 PULSE PER CREDIT
	OFF	2 PULSES PER CREDIT

BONUS GAMES	SW1	SW2
NONE	ON	ON
FOR EVERY 50p	OFF	ON
FOR EVERY £1	ON	OFF
FOR EVERY £2	OFF	OFF

PLEASE NOTE:- A BONUS GAME WILL ONLY BE AWARDED IF THE GAME PRICE
               OF PLAY IS LESS THAN THE BONUS VALUE SET. ALSO IF
               A MIXTURE OF COINS ARE INSERTED, THE TIME INTERVAL
               BETWEEN COINS INSERTED MUST BE OF LESS THAN 5 SECONDS
               FOR THE BONUS TO BE AWARDED.

ELECTROCOIN AUTOMATICS LTD

EXAMPLES OF SETTINGS. (FOR £1 INSERTED)

PRICE OF PLAY	BONUS GAMES	CREDITS	BONUS	TOTAL
10p	OFF	10	NONE	10
10p	FOR EVERY 50p	10	2	12
10p	FOR EVERY £1	10	1	11
20p	OFF	5	NONE	5
20p	FOR EVERY 50p	5	2	7
20p	FOR EVERY £1	5	1	6
30p	OFF	3	NONE	3
30p	FOR EVERY 50p	3	2	5
30p	FOR EVERY £1	3	1	4
40p	OFF	2	NONE	3
40p	FOR EVERY 50p	2	2	4
40p	FOR EVERY £1	2	1	3
50p	OFF	2	NONE	2
50p	FOR EVERY £1	2	1	3

CHASE H.Q.™

UP RIGHT

PARTS CATALOGUE

● CABINET ASSY

5

3

4

1

2
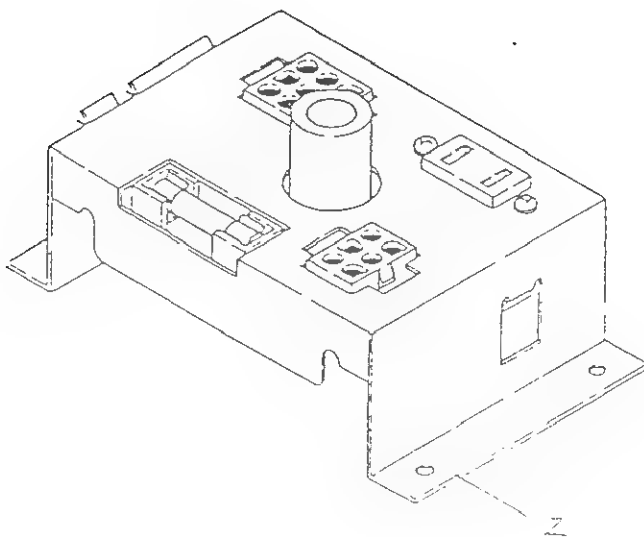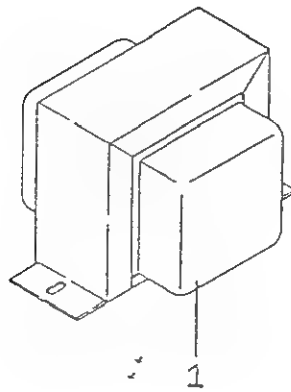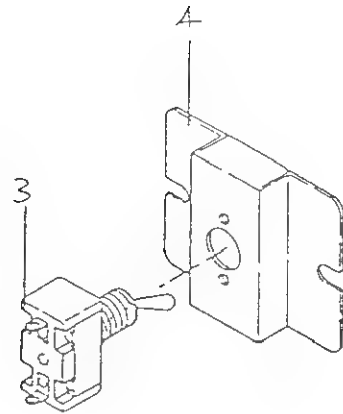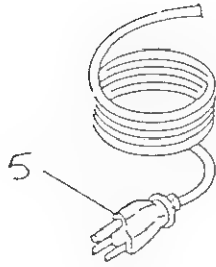
ITEM   PARTS NO.   DESCRIPTION

1	C10 00349A	TRANSFORMER
2	M41 00027A	CONNECTOR BOX ASSY
3	C02 00020A	TOGGLE SWITCH ET125A-12
4	E30 01861A	MAIN SWITCH BOX
5	C07 00208A	AC CORD 3C

VIDEO & CENTRAL CONTROL ASSY

3

2

1

8

SERVICE
S W.

7

SOUND
VOLUME

6

5

4
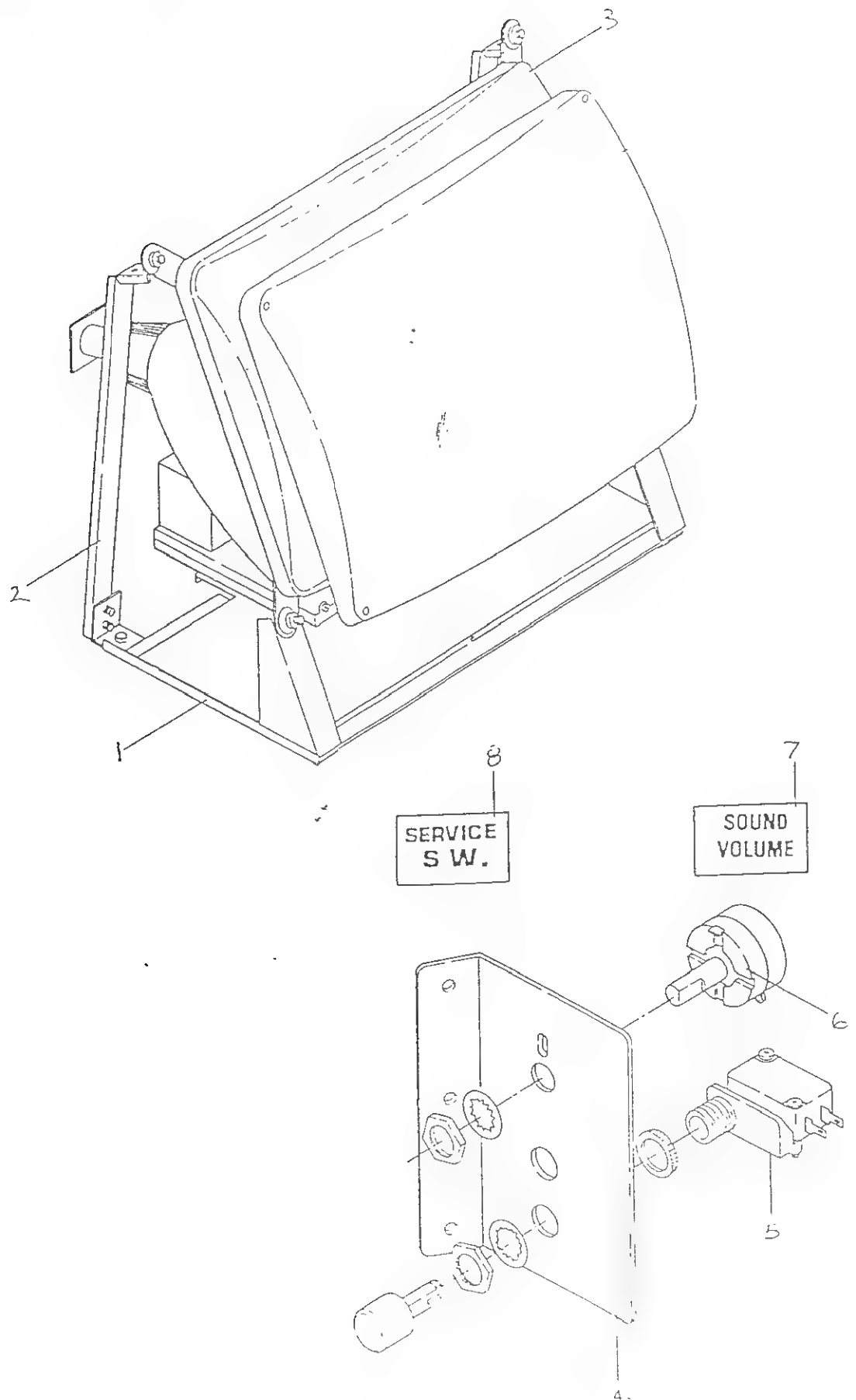
ITEM	PARTS NO.	DESCRIPTION
	VIDEO ASSY 20" ON THE BRACKET	
1	E30 06124A	MONITOR BASE
2	E30 06117A	MONITOR SUPPORT
3	M08 00082A	VIDEO ASSY 20"
	CENTRAL CONTROL ASSY (M90 01531A)	
4	E30 05055B	SWITCH BRACKET
5	C02 00033A	PUSH BUTTON SWITCH VAQ-4R
6	A21 06601A	VOLUME CONTROL
7	G10 00186A	SERVICE SWITCH STICKER
8	G10 00219A	SOUND VOLUME STICKER

● CONTROL PANEL ASSY

7

1

6

2

13

5

3

8

11

10

12

9
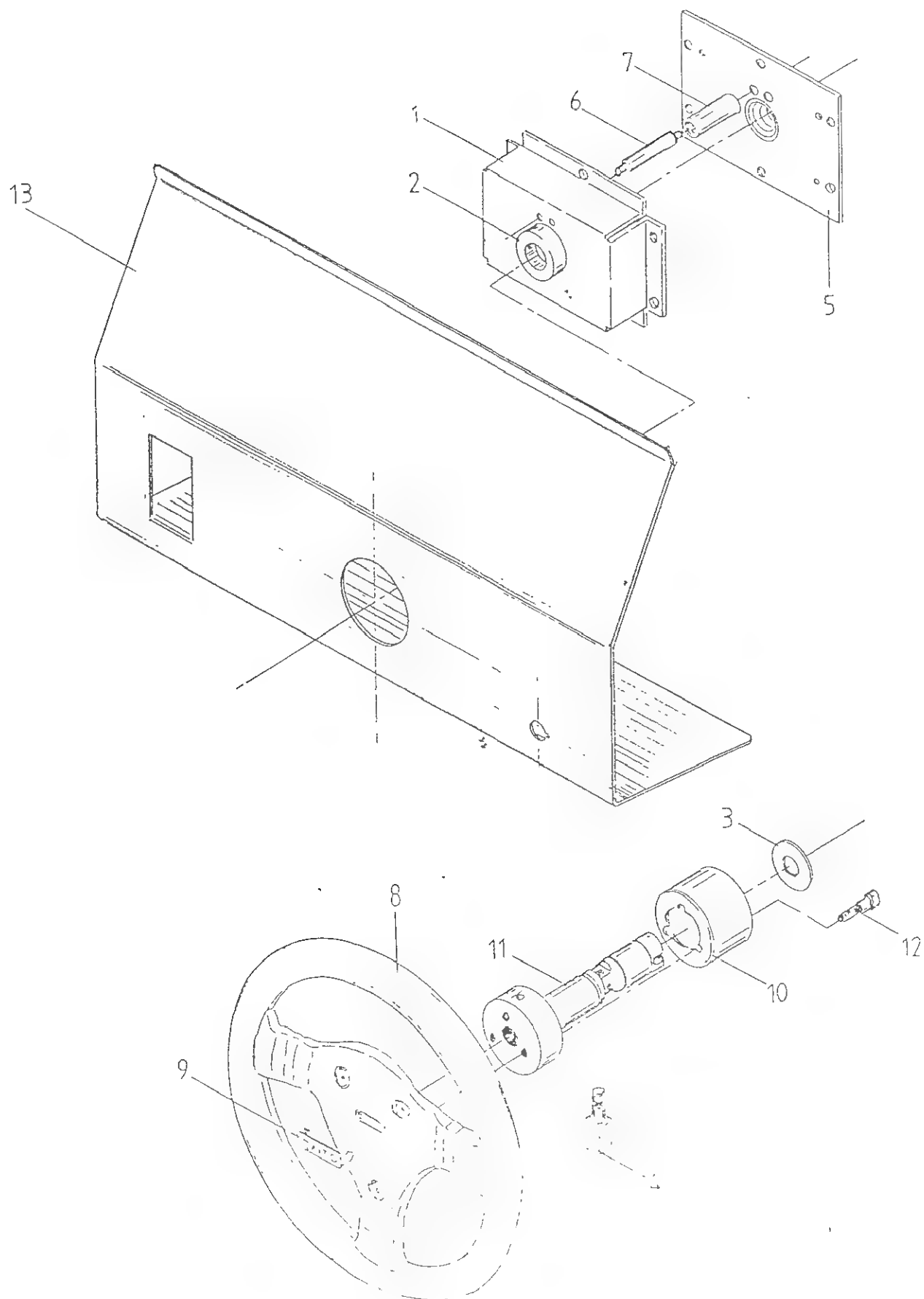
ITEM	PARTS NO.	DESCRIPTION
1	E90 00261A	STREERING BOX
2	E60 00095 A	BALL BEARING NTN-6804
3	E30 04786A	WASHER 20.5×38
4	E10 00732A	STOPPER SHAFT
5	E90 00260A	STEERING BRACKET
6	E10 00755A	HANDLE STOPPER
7	F90 01403 A	HANDLE STOP RUBBER
8	H90 00192A	HANDLE
9	G95 00285B	HANDLE ENBLEM
10	E30 06135A	HANDLE PIPE
11	E10 00826B	STEERING SHAFT
12	E10 00735A	SHOULDER SCREW
13	20777	CONTROL PANEL

ITEM	PARTS NO.	DESCRIPTION
	HANDLE CONTROL ASSY (M01 00091A)	
1	E90 00233A	KICK BACK BASE
2	F90 01435A	OILES FLANGE BUSH 80F-1206
3	E10 00734A	KICK BACK SHAFT
4	F90 01436A	THRUST WASHER R-TW1225
5	E10 00733A	SPRING SHAFT
6	E40 00210A	KICK BACK SPRING
7	E10 00756A	KICK BACK STOPPER
8	E30 04787A	CENTER PICK UP :
9	E30 04788A	KICK BACK BRACKET A
10	E30 04782A	CENTER STOPPER
11	F90 01405A	CENTER STOP RUBBER
12	E30 04789A	KICK BACK BRACKET B
13	E30 04785A	PHOTO SENSOR BRACKET
14	A90 00146A	PHOTO SENSOR TLP 1200
15	E90 00234A	GEAR PLATE
16	F90 00902A	OILES FLANGE BUSH 80F-0303
17	E70 00086A	SPUR GEAR
18	E30 04783A	SENSOR PLATE
19	F90 00644A	OILES FLANGE BUSH 80F-0404
20	E70 00087A	GEAR SHAFT A
21	E70 00088A	GEAR SHAFT B
22	F90 00877A	PULSE CAM
23	K90 00060A	PHOTO SENSOR PC BOARD ASSY

● PC BOARD
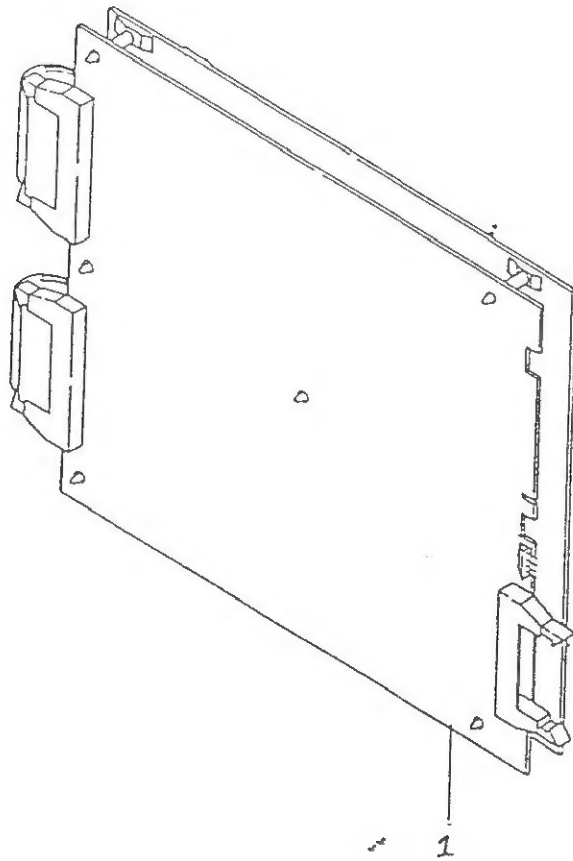
ITEM   PARTS NO.   DESCRIPTION

1   M43 00093B   MAIN PC BOARD ASSY

HANTAREX® US250

SW.MODE POWER SUPPLY

SCHEMATIC DIAGRAM
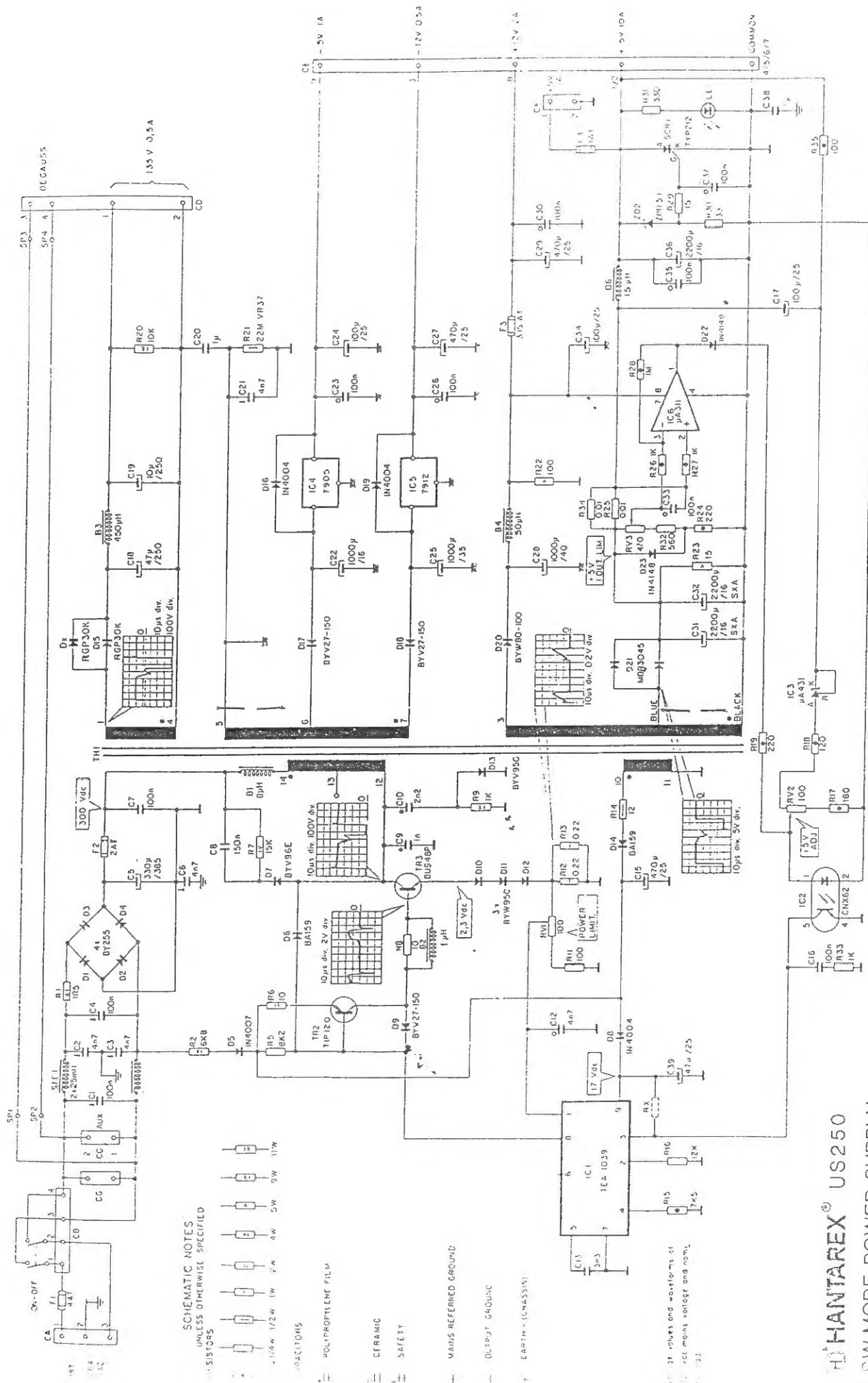
ELECTROCOIN AUTOMATICS LTD

Directors: John Stergides · John Collinson

UNIT 6 - 7 - 8
Ace Industrial Estate
Ferry Road
Cardiff, S. Wales

Telephone: 0222-373059
Telex: 892989 ELCOIN
Telefax: 0222-394396

Our Ref:

Your Ref:

Date: 21/6/88

Dear Customer

AFTER SALES & SERVICE DEPARTMENT - CARDIFF

We would like to take this opportunity to introduce you to the NEW service department at Electrocoin Automatics - Cardiff.

Normal working hours - 0800 - 16.30 Mondays - Fridays

Telephone number 0222 373059 - (This telephone number is now exclusive to Electrocoin After Sales).

After Hours/Weekends/Emergencies - we can now be contacted on the following telephone number - 0836 536195.

For the following enquiries please contact:-

Spares Enquiries - Phil Hayes-Pugh or Ian Heppenstall

Technical Information - Ian Colley

Workshop Manager - Mike Callan

Spares & Repairs Accounts - Julie Tipper

N.B.

Electrocoin Automatics at Cardiff are responsible for U.K. manufactured machines and all FAMOUS GAMES products.

To ensure a fast and efficient service prompt return of faulty parts is essential.

Hoping you will avail yourselves of the facilities offered by the After Sales department and assuring you of our continued best attention at all times.

PHIL HAYES-PUGH
After Sales Manager.